

ABSTRACT

The method for manufacturing a single crystal semiconductor achieves an object to reduce the impurity concentration nonuniformity within a semiconductor wafer plane and thus to improve the wafer planarity by introducing an impurity into the single crystal semiconductor more uniformly during the pulling of the single crystal semiconductor from a melt. In the course of pulling the single crystal semiconductor (6), the rotating velocity (ω_2) of the single crystal semiconductor (6) being pulled is adjusted to a predetermined value or higher, and a magnetic field having a strength in a predetermined range is applied to the melt (5). Particularly, the crystal peripheral velocity is adjusted to 0.126 m/sec or higher, and $M/V^{1/3}$ is adjusted to $35.5 \leq M/V^{1/3} \leq 61.3$. More desirably, the crystal peripheral velocity is adjusted to 0.141 m/sec or higher, and $M/V^{1/3}$ is adjusted to $40.3 \leq M/V^{1/3} \leq 56.4$.